



**Discrete Diffusion**



**Continuous Diffusion**



**Specialized Diffusion**



**Autoregression**



**Reinforcement Learning**



**Inference Latency**



**D3PM**

2021



**DiffusionBert**



**LD4LG**



**Diffusion-LM**

2022



**SSD-2**



**DiffuSeq**



**Plaid 1B**



**RDMs**



**SSD-LM**



**SEDD**



**FiLM**

2023



**DiffuLLaMA**



**EDLM**



**MDLM**



**RADD**



**MD4**



**CLLM**



**Mercury Coder**



**LLaDA**



**DiffuGPT**



**HDLM**

**Ucla**



**d1-LLaDA**



**Gemini Diffusion**



**SpecDiff**



**MMaDA**

2024

2025